Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection
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November 5, 2013

Wanda I. Gonzalez
Site General Manager - Freetown Facility
ISP Freetown Fine Chemicals Inc.
238 South Main Street
Assonet, Massachusetts 02702

RE: **CONDITIONAL APPROVAL**
Application for: BWP AQ 02
NON-MAJOR COMPREHENSIVE PLAN APPLICATION
Facility No.: 303213
Transmittal No.: X255575
Application No.: SE-13-031

Dear Ms. Gonzalez:

The Massachusetts Department of Environmental Protection (MassDEP), Bureau of Waste Prevention (BWP) has reviewed Non-Major Comprehensive Plan Application (NMCPA) No. SE-13-031, received on August 1, 2013. NMCPA No. SE-13-031 requests approval to change fuel types for the operation of an existing steam boiler at the facility and to replace an existing boiler at the ISP Freetown Fine Chemicals Facility ("Facility" or "ISP"), 238 South Main Street, Assonet, Massachusetts.

The application was submitted in accordance with Section 7.02, "Plan Approval and Emission Limitations" as contained in 310 CMR 7.00 "Air Pollution Control Regulations," adopted by the Department pursuant to the authority granted by Massachusetts General Laws, Chapter 111, Sections 142A-E, and Chapter 21, Sections 4 and 6.

The Department's review has been limited to air pollution regulation compliance and does not relieve you of the obligation to comply with all other permitting requirements.

The application was submitted by Wanda I. Gonzalez of ISP, over the seal and signature of Alicia Kabir, P.E. No. 46671 of Environmental Resources Management (ERM) Consulting and Engineering Inc.

The application seeks approval to fire natural gas as the primary fuel for the existing boiler, with distillate oil as secondary fuel, and to replace an existing boiler with a new boiler complaint with the Industry Performance Standards contained in 310 CMR 7.26(30) through (37), and to re-establish federally enforceable operation limitations to increase the Facility-wide emissions cap in accordance with 310 CMR 7.26(30) while keeping the Facility below major source thresholds. This application references information from past plan approvals and will serve as a summary document for approvals issued prior to June 15, 2012, superseding the past plan approvals identified herein.

The Applicant has proposed to restrict the firing of distillate oil in the existing Boiler #1 and the firing of Ultra Low Sulfur Distillate (ULSD) oil in the proposed new Boiler #3, each not to exceed 48 hours per calendar year for purposes of regulation of both boilers as a "gas-fired boiler" as defined by Subpart JJJJJJ, 40 CFR Part 63.11237.

The Facility has federal potential emissions below the criteria established 310 CMR 7.00: *Appendix C*(2)(a)1., and therefore not subject to the Operating Permit and Compliance Program.

A review of this application indicates that the ISP Freetown Facility consists of the following process areas:

- *Building F-5 Chemical Production, Acrylate Production (in the F5 Annex, formerly the Batch distillation) and Alcohol Recovery areas;*
- *Buildings F-7 and F-13 wastewater treatment plant (WWTP);*
- *Buildings F-1/ F-4 laboratories and F-4 pilot plant;*
- *Building F-2 boiler house area, emergency engines, and a hot oil-heating unit;*
- *Bulk storage tanks;*
- *Air Abatement Systems.*

EQUIPMENT & FACILITY DESCRIPTION

ISP produces polymers, specialty chemicals, and personal care products on a "batch" basis. Each batch occurs over a period ranging from one to several days. A campaign has multiple batches lasting from several days to several weeks and consists of multiple process steps. The type of product, the quantity produced, and the production schedules vary from year to year.

A. Building F-5 Chemical Production, Acrylate Production, and Alcohol Recovery Areas.

Building F-5 contains the equipment for the production of liquid and dry solids batch chemicals. Table No. 1A identifies the equipment in Building F-5.

The F-5 reactors are equipped with condenser(s) that use either water and/or ethylene glycol. The condensers are part of ISP's production equipment for solvent reflux during process reactions and are not part of the emission control system.

Building F-5 uses a closed loop, hot oil heating system to heat the jackets of two F-5 reactors.

The Acrylate Production Area, located within the F5 Annex, contains equipment for the production of liquid and solid batch chemicals. Acrylate production will use equipment previously approved for solvent recovery. Additionally, two new reactors will be installed, replacing two smaller reactors.

The Alcohol Recovery Area is a two-column distillation system for the recovery of isopropyl alcohol from various aqueous process streams. The aqueous process stream is accumulated in two 60,000-gallon storage tanks (S-076 and S-077). Vents from the storage tanks, feed tank, holding tanks and column condensers are tied into the F-5 VRU headers.

Emissions from building F-5 chemical production, Acrylate production, and alcohol recovery areas include volatile organic compounds (VOC), halogenated organic compounds (HOC), hazardous air pollutants (HAPs), inorganic gases, and particulate matter (PM).

B. Buildings F-7 and F-13 Wastewater Treatment Plant (WWTP).

Buildings F-7 and F-13 are associated with wastewater treatment plant (WWTP) operations. The WWTP is housed in and next to Buildings F-7 and F-13. The WWTP system includes tanks and pH control facilities to equalize and neutralize the wastewater, physical chemical treatment facilities to remove settleable solids from the wastewater, and a VOC/HOC steam stripper to remove and collect organic compounds from the wastewater.

The treated wastewater is discharged to the Fall River Publicly Owned Treatment Works (POTW). Gases containing VOC and HOC and HAP are emitted from the following sources:

1. Direct-to-air vent emissions:
    a. One (1) stack on Building F-13 serving the Equalization and Neutralization (E & N) process sumps, equalization and neutralization tanks and spill diversion tanks. The vent is equipped with carbon canisters.
    b. Three (3) vents from Building F-7:
        1) One (1) vent for the combined emissions from two stripper feed tanks, a sludge feed tank, and a clarifier tank (connected to carbon canisters);
        2) One (1) glycol chilled condenser vent from the top of the stripper. The vent is connected to carbon canisters for odor control, not VOC/HOC control;
        3) One (1) filter press vent.
2. Secondary off-site emissions of VOC, HOC, and Hazardous Air Pollutants (HAPs) included as constituents in the wastewater that are discharged to the Fall River POTW.
3. Emissions that occur in the collection systems are included in B.1.a. and B.1.b.

C. Building F-1/F-4 Laboratories and Building F-4 Pilot Plant.

The Laboratories located in Buildings F-1 and F-4 are for product quality control and for research and development.

The F-4 pilot plant uses small-scale pilot and developmental equipment. Pilot development activities include basic research, scale-up test production of new products, and small volume commercial manufacturing. The F-4 pilot plant equipment is identified in Table No. 1B.

Emissions from the Laboratories and Pilot Plant include VOC, HOC, HAPs, inorganic gas, particulate, and carbon monoxide.

D. Building F-2 Boiler House Area, F-5 Hot Oil Heater and Emergency ULSD Engines.

The boiler house contains two natural gas and oil (liquid) fuel -fired boilers: Existing Boiler #1 is a Keystone-Zurn boiler rated at 28.8 Million BTU per hour (MMBtu/hr) and Boiler #2 is a 13.8 MMBtu/hr Stone Johnston PFTA 350 boiler to be retired. This application proposes to replace existing Boiler #2 with a new Victory Energy boiler rated at 39.5 MMBtu/hr. The new boiler will be identified as Boiler #3. Adjacent to Building F-5 is a closed loop hot oil heating system (HEATEC Model 3010) equipped with a 6.0 MMBtu/hr burner. Six emergency engines fueled with ULSD oil at various locations within the Facility are identified in Table No. 1C.

Emissions from all fuel burning equipment whether approved, exempt, or subject to Industry Performance Standards must be included for purposes of determining compliance with the emission limitations established in this Approval.

E. Bulk Storage Tanks.

The bulk storage tanks include the following:

1. Four outdoor bulk solvent storage tanks of 30,000 or 60,000 gallon capacity. Two of the bulk storage tanks have split compartment tanks resulting in six tanks overall.
2. A 15,000-gallon vertical liquid storage tank (S-535) located outside Building F-5, to be used for the accumulation of hazardous waste.

Two storage tanks (S-076 and S-077) that contain Alcohol Recovery feed stock are not considered bulk storage tanks. The two tanks are included within the alcohol recovery equipment system and emissions from the 2 tanks are accounted for in the Alcohol Recovery batch emission calculation sheet.

VOC, HOC, and HAP emissions from these tanks include working (tank filling) and breathing (thermal expansion) losses. The VOC, HOC, and HAP emissions are vented to the F-5 VRUs.

Three new bulk storage tanks are proposed to support Acrylate Production operation. VOC and HAP emissions from two of these tanks will be vented to the Fume Scrubber for odor control.

Although collateral control of VOC and HAP emissions may occur, for purposes of this approval, no control will be assumed. The third tank, 50% sodium hydroxide, will be vented directly to the atmosphere.

F. Air Abatement Systems.

1. Table No. 1A identifies the equipment connected to the F5 liquid nitrogen (N_2) Vapor Recovery Unit ("VRU") system. The VRUs shall achieve an overall VOC/HOC control efficiency of 95%. The VRU system consists of two (2) VRUs. Each VRU is equipped with a pre-filter, an ethylene glycol cooled pre-condenser, a three-stage liquid nitrogen condensing system, and other ancillary equipment. Each VRU has a maximum gas flow rate of 550 SCFM. Each VRU system is designed to handle an instantaneous VOC/HOC surge rate of approximately 964 pounds per hour at 70% by volume of nitrogen at 95°F. The average VOC/HOC design rate for each VRU is 379 pounds per hour at approximately 2,400 pounds per hour of nitrogen at 70°F. In the closed methanol coolant loop approximately 200 gallons of methanol is circulated as a heat transfer fluid. Each VRU is equipped with two condensers in parallel allowing one condenser to be regenerated (thawed) or held in stand-by mode while the other one is in service.

   Liquid N_2 is used in indirect heat exchangers to cool and condense the VOCs, HOCs, and HAPs in the process emission streams. The liquid N_2, upon warming, becomes gaseous N_2 and may supply the plant's inert N_2 gas system for reuse. The liquid VOC, HOC, and HAP from the condensers are collected into several tanks. The vents from these tanks are returned to the VRU system for VOC, HOC, and HAP control (vapor return). The treated process emission stream from the VRU system passes through a mist control device, is heated in an economizer/heat exchanger, and vented to the atmosphere. The recovered liquid VOC, HOC, and HAP from the condensed process air emissions may be recycled, reclaimed and/or reused at the Facility or may be shipped off-site for recovery or disposal at a licensed facility.

2. The Building F-5 packed bed Ceilcote-SPT-26 300 CFM fume scrubber system, rated at 200 SCFM at 70°F, is equipped with a mist control device to minimize the opacity of the scrubber stack exhaust. The fume scrubber gas outlet is provided with a piping connection and an automatic damper to either the atmosphere or to the VRU system.

   Best Available Control Technology ("BACT") has been established as a fume scrubber with an acid gas removal efficiency of 98%. The fume scrubber may be used without the VRU and vented directly to atmosphere when batch process emissions only require acid fume scrubbing and not VOC/HOC control. Batch process emissions are vented to the fume scrubber, the VRU, or both, in accordance with Attachment 2. Emissions from batch processes that require VOC/HOC and inorganic acid vapor control are routed to the fume scrubber first then to the VRU system before discharge to the atmosphere.

ISP will install carbon canisters downstream of the direct-to-atmosphere vent. The vent is connected to carbon canisters for odor control, not VOC/HOC control. The carbon canisters shall be used as necessary to ensure that there is no odor nuisance condition off-site at any time.

3. The Ceilcote, Model VAW 400, gravity spray air washer, rated at 40,000 cubic feet per minute, is used to control particulate emissions from equipment in Building F-5. Fugitive dust emissions and some VOC, HOC, and HAP emissions from equipment requiring control of particulate emissions are captured by a local ventilation system during operations. The air washer may be used for venting emissions from batch chemical processes that are low VOC and HOC emitters or low acid fume emitters, as identified in Attachment No. 2. The Department is approving the air washer system as the particulate control system.

4. The Donaldson Torit DFT 2-8 Dust Collector, rated at 3,500 CFM, is used to control particulate emissions from equipment in Building F-5. This dust collector, which has a Minimum Efficiency Reporting Value (MERV) of 13, is designed to achieve a particulate control efficiency of 99.9% on 0.2 - 2 micron particles.

5. BACT for Tank Farm emissions has been established as N_2 inert gas pressure controls on each tank, a submerged fill pipe on each storage tank, and vapor return systems to the supply trucks or to the VRU (including S-076 and S-077). Working and breathing emissions are controlled by returning vapors from the tank being filled to the delivery truck or to the VRUs. The overall VOC, HOC, and HAP control efficiency shall be greater than 93.8%.

6. F-4 pilot plant air pollution control equipment includes two Ceilcote air washers rated at 19,000 standard cubic feet per minute (scfm), one Branch Environmental (BE 100120) fume scrubber rated at 150 scfm, two ISP custom portable fume scrubbers rated at 200 scfm, one BOC Gases liquid nitrogen condensing system (VRU #3) rated at 25 SCFM, one Rotoclone hydrostatic precipitator (dust collector) rated at 2,000 CFM, and Calgon activated carbon canisters. The carbon canisters and VRU #3 have been established as BACT for the Pilot Plant's 300 and 500-gallon reactors. Procedures and work practices described in Volume II of application 4P99033[1] have been established as BACT for the laboratories and smaller pilot equipment.

7. Carbon canisters have been identified as BACT for the following vents:
   a. The vents on the two F-7 stripper column feed tanks.
   b. The F-7 clarifier tank and sludge feed tank vents.
   c. The 300 and 500-gallon reactor vents in F-4 when VOCs other than ketones are present in the reactors in quantities greater than one percent.

[1] Plan Application Approval 4P99033 continues to be superseded by this approval. The underlying application, which outlines the referenced procedures and work practices, remains valid.

G. Regulatory Applicability

The batch processes at ISP's Freetown Facility qualify as chemical manufacturing process units (CMPU) under 40 CFR Part 63 Subpart VVVVVV "Area Source Generally Available Control Technology Requirements for Chemical Manufacturing Area Sources." Certain feedstocks, intermediate products, and byproducts at the Facility will contain acetaldehyde, a regulated HAP, in concentrations of less than 0.1 weight percent. No other urban HAP identified in Table 1 of Subpart VVVVVV will be present in the CMPU feedstocks, products, or byproducts. As such, ISP has indicated that the CMPU will not be subject to Subpart VVVVVV. The Department has not accepted delegation of 40 CFR 63 Subpart VVVVVV, therefore any questions on this matter should be directed to the USEPA, Region 1.

The Applicant has indicated they intend to operate Boiler #1 and Boiler #3 as gas-fired boilers, as defined in 40 CFR 63, Subpart JJJJJJ, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources, and to limit the operation of each boiler to a total of 48 hours when burning (liquid) fuel oil during any calendar year, and therefore not subject to Subpart JJJJJJ, as per 40 CFR 63.11195(e). The Facility must retain records to demonstrate ongoing compliance with this status. The Department has not accepted delegation of 40 CFR Part 63, Subpart JJJJJJ, therefore any questions on this matter should be directed to the USEPA, Region 1.

The Department is of the opinion that NMCPA No. SE-13-031 is in conformance with current air pollution control engineering practices and represents BACT. The Department hereby grants **Conditional Approval** of the application, subject to the following descriptions, requirements and provisions:

I. EMISSION LIMITATIONS:

1. ISP shall limit potential emissions from the Facility, as described in Table Nos. 2A and 2B, "Facility Wide Emission Limitations." ISP shall comply with all record keeping, operating limitations, notification procedures, monitoring, testing and reporting requirements stated herein to verify that the emission limits contained in this Conditional Approval are not exceeded.

2. ISP shall maintain a fiscal month and a consecutive 12-month period summary of VOC, HOC, HAP, PM_{10}, $PM_{2.5,}$ NO_X, SO_2, CO, CO_2, and inorganic gas (including SO_3 and acid gas) emissions from the Facility to ensure compliance with the established emission limitations. Emissions shall be determined by process area and compiled for the entire Facility by use of the forms contained in Attachment No. 5. Supplemental records shall be maintained defining individual HAPs by building/area.

    a. Four types of batch emission calculations must be performed for each fiscal month as appropriate for the different emission sources described below. ISP's fiscal month approximates a calendar month and contains between 28 and 35 days. The four types of batch emission calculations are:

1) VOC, HOC, and HAP vent emission calculations based principally on Raoult's Law and the Ideal Gas Law as identified in Section 1.2 of Volume II of CPA Application No. 4P99033[2].

2) Acid Gas emissions determined on a per batch basis using molar mass balances and solubility in process liquid.

3) PM_{10} and $PM_{2.5}$ emissions calculated based on a qualitative assignment of dusting potentials for dry and powdered materials as identified in CPA Application No. 4P99033[2], Volume II, Section 1.2.

4) VOC, HOC, and HAP fugitive emissions for all F-5 batch processes calculated by application of the EPA's stratified emission factors method (EPA-450/3-88-010). Fugitive emissions from the Alcohol Recovery system shall be based on EPA Leak/No Leak emission factors method (EPA-625/10-84-004). The methodology is identified in CPA Application No. 4P99033[2], Volume II, Section 1.2.

b. Emission sources

1) VOC, HOC, and HAP emissions from the F-5 VRUs.

The amount of VOC, HOC, and HAP emissions from the F-5 vapor recovery units shall be calculated and recorded monthly by calculation procedures kept on file at the Facility using; (a) actual monitored mass flow rate of gases from the system, (b) the time weighted average temperature as monitored at the vapor outlet of the control condenser, and (c) the results of an analysis of a grab sample taken from the condensate holding tank before each emptying of the tank. The sample shall be analyzed for VOCs, HOCs, and HAPs that would be present in the emissions during the period of condensate tank filling, and (d) based on the assumption that the VOCs, HOCs, and HAPs from the unit are at their dew points at the condenser outlet conditions.

2) Acid gas from the processes that vent through the F-5 fume scrubber and exit out the F-5 VRUs.

By acid batch calculation sheet contained in Section I.2.a.(2), of this approval, multiplied by the number of batches as abated by the overall control efficiency stated in paragraph F(2). The size of each batch run may vary from the standard batch size identified in Attachment No. 3. The emissions associated with the batch shall be pro-rated in proportion to the actual size to the standard batch size.

[2] Plan Application Approval 4P99033 continues to be superseded by this approval. The underlying application, which outlines the referenced emission calculation methodologies, remains valid.

3) VOC, HOC, and HAP from processes not vented through the F-5 VRUs.

The batch calculation sheet contained in Section I.2.a.(1) shall be used to determine if the process emissions are less than 85 lb/batch and not required to be vented through the F-5 VRUs. For emission tracking purposes, all batches with this determination shall be recorded based on the actual emission rate if the VRU is not used during batch production. If the VRU is used, the emissions shall be tracked (as is required for batches that are greater than 85 lb/batch) as described in Provision I.2.b.(1). The size of each batch run may vary from the standard batch size identified in

Attachment No. 3. The emissions associated with the batch shall be pro-rated in proportion of the actual size to the standard batch size. If the pro-rated emissions are below the 85 lb/batch threshold, the batch emissions are not required to vent through the F-5 VRUs. If the pro-rated emissions are above the 85-lb/batch threshold, the batch emissions shall vent through the F-5-VRUs.

4) Acid gas from processes that vent only through the F-5 fume scrubber and are not vented through the F-5 VRUs.

By acid batch calculation method in Section I.2.a.(2), multiplied by the number of batches as abated by the overall control efficiency stated in paragraph F(2). The size of each batch may vary from the standard batch size identified in Attachment No. 3. The emissions associated with the batch shall be pro-rated in proportion to the actual size to the standard batch size.

5) VOC, HOC, and HAP from wastewater treatment plant.

a) Secondary fugitive emissions shall be calculated as follows:

ISP shall measure the concentrations of organics at the WWTP outlet. ISP shall maintain and operate an integrating flow meter on the wastewater outlet of the treatment plant. Once per month, ISP shall determine the concentration of organic materials in a wastewater sample using EPA Method 624 and 625. EPA Methods 624 and 625 shall be augmented to include testing for 2-Bromopropane, Methyl ethyl ketone, 1,2-diethylbenzene, 1,3-diethylbenzene and 1,4-diethylbenzene. Mass output of VOC and HOC shall be calculated for the month by multiplying the measured concentrations above the detection limit for the month by the integrated total wastewater flow. The mass output, as calculated, will then be multiplied by 0.63 to calculate the off-site VOC, HOC and HAP emissions as specified in the EPA Guidance Document, “Draft Procedure for Establishing Emissions for Early

Reduction Compliance Extensions, Volume I - Synthetic Organic Chemical Manufacturing."

b) Direct to air vent emissions shall be determined by taking 1/12 of the annual potential-to-emit of the WWTP, and using that as the actual monthly amount emitted from the WWTP, i.e., 0.1475 tons/month of total VOC, HOC, and HAP.

6) VOC, HOC, and HAP fugitives from all F-5 processes.

By the batch calculation methodology contained in Section I.2.a.(4), multiplied by the number of batches. The size of each batch may vary from the standard batch size. The emissions associated with the batch shall be pro-rated in proportion to the actual size to the standard batch size.

7) VOC, HOC, and HAP vent emissions from Alcohol Recovery.

Vent emissions from alcohol recovery are calculated at the VRU using the methodology identified in Section I.2.b.(1).

8) VOC, HOC, and HAP from Bulk Storage Tanks.

Actual monthly emissions from the bulk solvent storage tanks shall be assumed to be 1/12 of the established annual potential to emit, i.e., 0.21 tons/month of total VOC, HOC, and HAP.

9) VOC/HOC/NO_X/SO_2/PM/PM_{10}/$PM_{2.5}$/CO/CO_2 from boilers and the hot oil heater.

Maximum heat capacity (MMBtu/hr HHV) multiplied by the NO_X emission factors contained in Attachment No. 1. of this Approval. For pollutants other than NOx, use maximum heat input capacity multiplied by the emission factors from EPA AP-42, "Compilation of Air Pollution Emission Factors" , 310 CMR 7.26(33)(b), and as contained in Appendix B of the Application.

The particulate emission (PM_{10}) rate for Boiler #1 and for the hot oil heater shall not exceed 0.10 pounds per million Btu input at any firing rate.

10) VOC/HOC/ NO_X /SO_2/PM/PM_{10}/ $PM_{2.5}$/CO/CO_2 from emergency generators.

Engine run time multiplied by the NO_X emission factors contained in Attachment No. 1. of this Approval. For pollutants other than NO_X, use engine run time multiplied by the emission factors from USEPA AP-42,

310 CMR7.26(42), 40 CFR 60 Subpart IIII and 40 CFR 89.112 as stated in Appendix B of the Application.

11) F-1/F-4 Emissions.

ISP shall maintain materials accounting records to determine VOC, HOC, and HAP emissions from the laboratories and pilot plant operations. ISP shall maintain records to track emissions only for experiments (in the laboratories) that use greater than 3 liters of VOC, HOC or HAP. Experiments using less than 3 liters of VOC, HOC, and HAP shall have actual monthly emissions of 1/12 of the established annual potential emission rate for these small-scale operations. The established monthly emissions from these small-scale operations shall be 0.025 tons/month of total VOC, HOC, and HAP (based on historical data, which is updated periodically). Total F-1/F-4 laboratory emissions shall be the sum of 0.025 tons/month and the emissions from the greater-than-3-liter operations as determined by material accounting.

3. Opacity of gases from the F-5 fume scrubber system shall be five percent or less at all times except for two minutes in any one hour when the visible emissions may have an opacity ranging from five to ten percent. At no time shall the emissions from the scrubber system exceed ten-percent opacity.

4. ISP shall limit Facility-wide emissions of hazardous air pollutants (HAPs) as listed in the 1990 Clean Air Act (CAA) Amendments, Section 112(b), to the following:

   a. Any single HAP:
      - Tons per month: 2.0
      - Tons per consecutive 12-month period: 9.9

   b. Total HAPs:
      - Tons per month: 4.0
      - Tons per consecutive 12-month period: 24.0

II. OPERATIONAL LIMITATIONS:

1 ISP shall maintain an overall VOC/HOC control efficiency of 95% for the F-5 VRUs.

2 ISP shall maintain a gas temperature set point for the F-5 VRUs, at a maximum of -84.4°C (-120°F). The set point shall be measured at the liquid nitrogen main process condenser outlet. Operational excursions from the set point are allowed as described in the SOP.

3. Temperature of coolant inlet for Building F-7 steam stripper condenser must be maintained at or below + 5°C.

4. ISP shall maintain an overall particulate control efficiency of 99.9% for the building F-5 dust collector.

5. The pressure differential across the building F-5 dust collector shall be maintained between 2 and 9.6 inches of water, gage.

6. ISP shall limit distillate fuel oil consumption in Boiler #1 to 9,216 gallons per month, and 18,432 gallons per consecutive 12-month period. When Boiler #1 is firing fuel oil, it shall be limited to fuel that has a sulfur content of 0.55 lbs/MMBtu (1%) or less by weight. Note: At Boiler #1's maximum firing rate, 9,216 gallons represents 48 hours of operation.

7. ISP shall limit the operation of Boiler #1 to a total of 48 hours during any calendar year when burning (liquid) fuel oil.

8. ISP shall limit fuel oil consumption in Boiler #3 to 13,543 gallons per month, and 27,086 gallons per consecutive 12-month period. When Boiler #3 is firing fuel oil, it shall be limited to ULSD oil that has a sulfur content of 0.0015% or less by weight. Note: At Boiler #3's maximum firing rate, 13,543 gallons represents 48 hours of operation.

9. ISP shall limit the operation of Boiler #3 to a total of 48 hours during any calendar year when burning (liquid) fuel oil.

10. The existing hot oil heater shall be limited to consuming natural gas or fuel oil containing 0.03 lbs/MMBtu (0.05%) or less by weight sulfur. Note: Hot oil heater emissions are based on 8,760 hours of operation per consecutive 12-month period.

11. The fuel for the emergency engines shall be limited to ULSD oil containing 0.0015% or less by weight sulfur. Operation of each emergency engine shall be limited to 300 hours per month, and 300 hours per consecutive 12-month period.

III. SPECIAL CONDITIONS:

1. Unless otherwise specified, the conditions of this Conditional Approval shall take effect upon the date of issuance.

2. This Conditional Plan Approval shall supersede the following previous approvals granted to the Facility:

Approval No.	*Date Issued*
SM-77-015-IF	June 28, 1978 and Sept 17, 1978
SM-77-015-CO	May 2, 1978
SM-86-047-CO	May 12, 1986
4P87044	July 28, 1987
4P88031	Feb 24, 1988
4P88076	May 18, 1988
4P88094	July 6, 1988
4P88105	July 8, 1988
4P88126	July 12, 1988
4P88239	Dec 20, 1988
4P89101	August 14, 1990
4P90003	March 14, 1990
4P90115	Sept 14, 1990
4P90207	1990
4P92080	June 22, 1993
4P94076	August 1, 1995
4P97009	December 30, 1997
4P99033	December 3, 1999
4P10034 *	February 7, 2011
SE-12-010 **	June 15, 2012

* Plan Approval 4P10034 is superseded by this approval. The underlying application remains valid.
** Only the facility-wide PM/PM_{10}/$PM_{2.5}$ emission limits are superseded. New facility-wide limits are established in Approval SE-13-031.

3. Vent emissions from the various building F-5 batch processes shall be abated as detailed in Attachment No. 2.

4. ISP has submitted standard operating and maintenance procedures (SOP/SMP) for VRU #1 and #2, which are incorporated by reference into this approval. ISP has prepared a leak detection and repair (LDAR) program as part of the SOP that is also incorporated by reference into this approval. ISP has submitted an SOP/SMP for VRU #3 and a SOP/SMP for the other Facility air pollution control equipment that are incorporated by reference into this approval. A description of any modifications to the SOP/SMP/LDAR shall be submitted, by letter, to the Department within 30 days of such modification.

5. The F-5 fume scrubber shall be used to control all F5 process vent emissions that result in a batch acid gas emission rate of 4 pounds per hour or more, before control, as

demonstrated by Established Batch Emission Calculations. Attachment No. 2 identifies the batch processes that require acid gas control.

6. Additional compliance testing may be required by the Department for emissions from the F-5 VRU systems. ISP shall conduct any additional tests required by the Department using the appropriate standard EPA Reference Methods in the time frames prescribed by the Department.

7. F-4 Pilot Plant Operation.

   ISP shall maintain the following emission controls at the F-4 Pilot Plant. OSHA Laboratory standard (29 CFR 1910.1450) shall be followed for all applicable equipment in the pilot plant. In addition:

   For the 300 and 500 gal reactors. If the current process contains greater than 1% by weight of HOC or ketones, then the use of the F-4 VRU is required. If the current process contains greater than 1% by weight of other VOC then either the use of the VRU or carbon canisters is required.

   For other pilot plant equipment, processes may be run that emit VOC, HOC or HAPs.

   If any HAPs are emitted that are not identified in Attachment No. 4, then ISP is required to report pursuant to Section IV.2.c.

   ISP is allowed to make test batches where air pollution controls referenced above would otherwise be required, but for technical or safety reasons are not appropriate. Three (3) working days prior notice to the Department is required for such test batches.

   Due to the nature of the pilot plant activities, it is allowable to move equipment around within F-4, or to add new small-scale equipment. ISP is not required to notify or get approval from the Department if activities necessitate moving equipment around within F-4, or adding new small-scale equipment. The relocation of existing equipment or introduction of new equipment may require a roof penetration for a vent or rupture disc. ISP shall maintain an updated roof plan and penetration description for process exhaust stacks. ISP is required to notify the Department only when the activity involves the installation of a new reactor. A new reactor is subject to the permitting requirements of the "Massachusetts Air Pollution Control Regulations" as contained in 310 CMR 7.00.

   ISP is blanket approved herein to augment control equipment with temporary additional air pollution equipment.

8. The construction, substantial reconstruction, or alteration of any equipment that is properly subject to 7.02(4)(a), Plan Approval Exemption List or to 7.03, Plan Application Exemption Construction Requirements may be done without "violating" this permit approval with respect to 7.02(4)(c)(3). All restrictions for the exempted alterations referenced above would still apply; for example, the need to maintain the record keeping system found at 7.02(4)(a), the Appendix A restrictions at 7.02(4)(b)(5) and the condition of air pollution restrictions at 7.02(4)(b)(7). When the aggregate incremental emission rate of all the less than one ton/yr sources reach a total of 5 tons/yr of total pollutants, a separate 310 CMR 7.02(2)(b) Limited Plan Application would be required for all the

equipment contributing to this 5 ton/yr increment. The submittal of such a Limited Plan Application would not invoke the need for a modification to this Comprehensive Plan Approval. Appropriate attachments from this Approval would be updated with the LPA.

Increments of additional N_2, CO_2, and O_2 emissions that are subject to 7.02(4)(a) or 7.03 are not to be included in the 5-ton/yr allocation above, and do not require a pre-construction plan approval.

9. Access for determining combustion efficiency for Boilers #1 and #3 shall be provided.

10. The height of all air pollution control stacks at the Facility shall be not less than ten (10) feet above the adjacent building roof, except the Building F-5 Air washer stack. All vents shall be in a vertical direction, without a restrictive rain cap or other device that may interfere with vertical exhaust dispersion.

11. The Department reserves the right to require changes in the SOP/SMP, record keeping, and monitoring, if determined necessary by the Department, to ensure enforceability with this document and to ensure continuous compliance.

12. Boiler #3 is subject to the Industry Performance Standards for Boilers as contained in Department Regulation 310 CMR 7.26(30) through (37). The Facility is responsible for maintaining compliance with all requirements of said regulations, including, but not limited to notification requirements contained therein.

13. Plan Approval SE-12-010, dated June 15, 2012, continues to remain in force, except for the facility-wide PM/PM_{10}/$PM_{2.5}$ emission limits, which are superseded with newly established limits contained in Approval SE-13-031, Tables Nos. 2A and 2B.

IV. MONITORING, RECORD KEEPING & REPORTING REQUIREMENTS:

1. Record keeping/Monitoring

   a. Operating and maintenance logs for air pollution control equipment and records required by the SOP shall be maintained on file at the Facility for three (3) years.

   b. A copy of this Conditional Approval with current revisions, as well as the SOPs/SMPs from Section III.4, shall be readily available at the plant. ISP shall operate the Facility in compliance with this Conditional Approval and with the up to date SOPs and SMPs at all times.

   c. ISP shall maintain records of building F-5 fume scrubber operation, including dates and times of operation such that scrubber operation can be compared with batch chemical production schedules.

   d. For the F-4 pilot plant, the temperature of the exit gas from the liquid nitrogen condenser shall be monitored. If the temperature exceeds -67.8°C (-90° F), an alarm shall sound. When the alarm sounds the condenser shall be restored to

proper operating conditions or the reaction shall be brought to a safe stopping point as described in the SOP.

When activated carbon is used, the canisters shall be arranged in series. The first canister will adsorb VOC until its capacity has been reached. At this point, breakthrough will occur and the second unit will begin adsorbing VOC. To establish when breakthrough has occurred, the second canister will be positioned on a scale. An increase in weight of 8% or more of the carbon drum before use would indicate that breakthrough has occurred.

e. The liquid N_2 condenser systems for F-5 shall be equipped with the following monitors:

1) Two (2) redundant temperature probes, individual transmitters, and data output for the condenser outlet gas emission.

2) Two (2) redundant gas (nitrogen or air) mass flow meters, indicators and individual transmitters and data output for continuous monitoring of condenser outlet gas flow rates.

f. The vent condenser on the WWTP system shall be equipped with a temperature probe, an individual transmitter, and a data output.

g. Pressure indicators shall verify that the intake air contaminant flow is maintained at negative pressure in the ductwork to the F-5 VRUs, air washer, and fume scrubber under all operating conditions. These pressure indicators shall be in place and operational at all times. There are no record keeping requirements associated with this provision.

h. Logs of bulk solvent storage tank fillings shall be maintained.

i. ISP shall test the VOC inlet concentration of the first carbon canister in series and the inlet and outlet concentrations of the second carbon canister in series in the E&N and solids area of the WWTP monthly to verify their performance using portable flame or photo ionization screening tests. Carbon canisters shall be replaced at or before 10% breakthrough of VOCs. Breakthrough shall be measured as the final outlet emission concentration as a percentage of the canister train inlet concentration. ISP shall keep records of the screening tests and carbon canister replacement schedules.

j. ISP shall maintain supplemental records defining the individual HAPs by building/area.

2. Reporting

a. When ISP makes a batch of a material not identified in Attachment No. 3, then it shall submit a revised Attachment No. 2 and No. 3 to the Department within 30 days of the start of the batch.

b. A summary of the monthly and the consecutive 12-month period total emissions shall be provided to the Department with the Facility's source registration report, as required by 310 CMR 7.12. The summary shall show, by criteria and non-

criteria air pollutant grouping, the actual weight of emission, for each of the consecutive 12-month periods. Emissions from F-1/F-4 laboratories and pilot plant shall be included in the criteria totals.

c. The report in Section IV2.b. shall include a revised copy of Attachment No. 4 (F-4 pilot plant HAPs) if at any time during the previous year, HAPs not identified on Attachment No. 4 were emitted from the F-4 pilot plant.

d. The report in Section IV2.b. shall include an exception report if any monthly or consecutive 12-month period limitation has been exceeded. The exception report shall include an explanation of the causes of the exceedance and a detailing of the corrective action taken.

e. When an unpermitted release to the air or threat of release to the air is discovered, ISP shall follow current Department regulations to notify and respond as specified in 310 CMR 40.00, Massachusetts Contingency Plan.

V. GENERAL CONDITIONS:

1. If any nuisance condition(s) should be generated by the operation of this Facility, then the Facility shall take immediate appropriate steps to abate the nuisance condition(s), including shutdown if necessary.

2. If asbestos remediation/removal should be required as a result of the approved construction, reconstruction, or alteration of this Facility, removal/remediation of asbestos shall be done in accordance with Regulation 310 CMR 7.15 in its entirety and 310 CMR 4.00.

3. The Facility shall allow Department and/or USEPA personnel access to the plant site, buildings, and all pertinent records at all times for the purpose of making inspections and surveys, collecting samples, obtaining data, and reviewing records.

4. Please be advised that this Conditional Approval does not negate the responsibility of the Facility to comply with other applicable federal, state, or local regulations now or in the future.

5. This Conditional Approval may be suspended, modified, or revoked by the Department if, at any time, the Department determines that the Facility is violating any condition or part of this Conditional Approval.

6. The Department's Compliance/Enforcement Chief for the Bureau of Waste Prevention at this Office must be notified by telephone or fax as soon as possible after the occurrence of any upsets or malfunctions to the Facility equipment, air pollution control equipment, or monitoring equipment that result in an excess emission to the air and/or a condition of air pollution.

7. In accordance with Regulation 310 CMR 7.12, the Facility shall register on a form obtained from the Department such information as the Department may request including:

   a. The nature and amounts of emissions from the Facility;

   b. Information that may be needed to determine the nature and amounts of emissions from the Facility;

   c. Any other information pertaining to the Facility that the Department requires; and

   d. Information required by Regulation 310 CMR 7.12(1)(a) to be submitted in accordance with 310 CMR 7.12 (1)(b).

8. Any proposed increase in emissions above the limits contained in this Conditional Approval must first be approved in writing by the Department pursuant to the Department's Air Pollution Control Regulations. In addition, any increase may subject the Facility to additional regulatory requirements.

9. The ability of the Facility to maintain emission rates at or below the levels stated in this Conditional Approval shall be demonstrated to the Department in the future if deemed necessary.

10. Any future compliance tests that may be required at this Facility shall be conducted in accordance with procedures set forth by the appropriate EPA Reference Test Methods and Air Pollution Control Regulations, 310 CMR 7.00, Section 7.13. A written pretest protocol must be submitted to this Office for written Department approval at least 30 days prior to the actual test. A test results report shall be submitted to this Office within 30 days after the completion of any required compliance testing.

11. The Facility shall comply with all provisions contained in this Conditional Approval. Should there be any differences between provisions contained in "General Conditions" and provisions contained elsewhere in the Conditional Approval, the latter shall govern.

12. The Facility shall be constructed and operated in strict accordance with the application approved herein. Should there be any differences between the aforementioned application and this approval letter, this approval letter shall govern.

This Conditional Approval is an action of the Department; you have a limited right to appeal. Please refer to the enclosed "APPEAL" information, Attachment No. 6.

The Department has determined that the filing of an Environmental Notification Form (ENF) with the Secretary of Environmental Affairs, for air quality control purposes, was not required prior to this action by the Department. Notwithstanding this determination, the Massachusetts Environmental Policy Act (MEPA) and Regulation 301 CMR 11.00, Section 11.03, provide certain "Fail-Safe Provisions" that allow the Secretary to require the filing of an ENF and/or an Environmental Impact Report at a later time.

Should you have any questions pertaining to this Conditional Approval please contact Mr. Dan Kamieniecki at (508) 946-2717 at the Regional Office.

Very truly yours,

Thomas Cushing, Chief
Permit Section
Bureau of Waste Prevention

Enclosure

ecc:

Freetown Board of Health
Freetown Fire Department
DEP/SERO – M. Pinaud
DEP/SERO – L. Black
DEP/Boston – Y. Tian
ERM – A. Kabir
ERM – M. Mulé
ISP – E. Morin

TABLE NO. 1A
BUILDING F-5(1), BULK STORAGE AND ALCOHOL RECOVERY
EQUIPMENT SCHEDULE

Device/Location	*Description*	*Equip Number*	*VRU*	*Size*
F-5 Process Area	Reactors	D-500	✓	5,000 gal
		D-501	✓	5,000 gal
		D-502	✓	3,000 gal
		D-503	✓	3,000 gal
		D-504	✓	10,000 gal
F-5 Berm Area	Process Tanks	S-531	✓	10,000 gal
		S-532	✓	10,000 gal
		S-533	✓	10,000 gal
	Hazardous Waste Tank	S-530	✓	10,000 gal
F-5 Process Area	Process Tanks	S-521	✓	10,000 gal
		S-525	✓	1,000 gal
		S-526	✓	2,000 gal
		S-560	✓	1,500 gal
		S-501		250 gal
		S-545	✓	3,000 gal
		S-564	✓	500 gal
		D-576		300 gal
		S-527		11,000 gal
		S-502A	✓	250 gal
		S-503A	✓	950 gal
Outside F-5	Hazardous Waste Tank	S-535	✓	15,000 gal
F-5 Separation Systems	Centrifuges	L-540	✓	13 ft3
		L-541	✓	13 ft3
	Centrifuge Tanks	S-522	✓	150 gal
		S-523	✓	150 gal
		S-545	✓	3,000 gal
F-5 Dryers	Conical Dryer	B-548	✓	165 ft3
	Fluid Bed Dryer	B-549		19 ft3
	Tank	S-548	✓	300 gal
F-5 Fume Scrubber System	Column	T-539[4]	✓	
	Reservoir	S-539		3,000 gal
	Knock-out pot	D-539	✓	100 gal

TABLE NO. 1A
BUILDING F-5[(1)], BULK STORAGE AND ALCOHOL RECOVERY
EQUIPMENT SCHEDULE

Device/Location	*Description*	*Equip Number*	*VRU*	*Size*
F-5 Air Washer System	Column	T-561		
Alcohol Recovery	Vent Condensers	E-061E	✓	
		E-063	✓	
	Tanks	S-050	✓	14,000 gal
		S-051	✓	7,900 gal
		S-052	✓	7,900 gal
		S-076	✓	60,000 gal
		S-077	✓	60,000 gal
F5 Acrylate Production	Reactors	D-505[3]		5,000 gal
		D-507[3]		5,000 gal
	Receivers	S-505[3]		2,000 gal
		S-507[3]		500 gal
		D-508		2,000 gal
		D-509		500 gal
		S-501		250 gal
	Emulsion Tank	S-5401[3]		5,000 gal
	Process Vessel	S-5409[3]		1,500 gal
Tank Farm for Acrylate Production	Acrylic Acid Storage Tank	S-5403[3]		22,000 gal
	Ethyl Acrylate Storage Tank	S-5404[3]		10,000 gal
	Caustic Storage Tank	S-5412[3]		6,000 gal
F-5 C12 Pasting System	Reactors	D-551	✓	50 gal
		D-552	✓	750 gal
		S-556		300 gal
	Tanks	S-554	✓	150 gal
		S-555	✓	225 gal
F-5 Apovac liquid ring system		P-559	✓	
F-5 Dry Vacuum System		P-543	✓	
F-5 Dry Vacuum System		P-544[3]	✓	

TABLE NO. 1A
BUILDING F-5(1), BULK STORAGE AND ALCOHOL RECOVERY EQUIPMENT SCHEDULE

Device/Location	*Description*	*Equip Number*	*VRU*	*Size*
Liquid Tote Dispensing Station	Totes	N/A[3]		250/350 gal each Tote (3 stackable sets total)
	Pumps	P-588A P-588B P-588C	✓(2) ✓(2) ✓(2)	
Flaker and Drumming Room	Flaking of Liquid Product	G-587		N/A
Super Sack Unloading	Solids Unloading	G-585 G-586		N/A
Drum Staging Area	Raw material and Product Handling	N/A		N/A
Ribbon Blender	Solids blending			
General Purpose Mill	Solids milling			
Tank Farm	Tanks	S-070 S-071 S-072 S-073 S-074 S-075	✓ ✓ ✓ ✓ ✓ ✓	30,000 gal 30,000 gal 30,000 gal 30,000 gal 30,000 gal 30,000 gal
Glycol Tanks		S-921 S-922		16,000 gal 16,000 gal
Various filter systems	F-5			
Hot oil heater				6 MMBtu/hr

NOTES:

(1) Building F5 includes the F5 Annex that houses the batch distillation and production equipment.
(2) Pumps are connected to the reactors by flex lines, therefore emissions during filling operations from the reactors are displaced to the VRUs [if required by Provision I(2)(b)(3)].
(3) Equipment approved in Approval 4P10034.
(4) Replacement in kind.

TABLE NO. 1B

BUILDING F-4, PILOT PLANT EQUIPMENT SCHEDULE

Equipment ID Number	*Type of Equipment*	*Capacity*
D404	Reactor	5 gallons
D405	Reactor	10 gallons
D406	Reactor	50 gallons
D410	Reactor	300 gallons
D417	Reactor	50 gallons
D420	Reactor	50 gallons
S420	Receiver vessel	50 gallons
D430	Reactor	10 gallons
D434	Reactor	20 gallons
D450	Reactor	500 gallons
D470	Reactor	50 gallons
S472A	Receiver vessel	50 gallons
S472B	Receiver vessel	10 gallons
D475	Jaygo mixer	75 gallons
Chiller	N/A	N/A
L401	Centrifuge	4.75 ft^3
B440	Tray Dryer	5 trays
B450	Tray Dryer	5 trays
B418	Conical Dryer	32 ft^3
F-408	Pressure nutsche	70 gallons
Portable	Pressure nutsche	30 gallons
G411	Wiped film evaporator	
	Pressure cans	
	Hot Room	

TABLE NO. 1C

BUILDING F-2, BOILER HOUSE AREA AND ULSD OIL ENGINES

Location	*Manufacturer/Model No.*	*Type*	*HP*
F-2	Kohler 300REOZDB	Emergency generator	402 HP
F-203	General Motors (serial no. K2H2009236)	Emergency fire pump	212 HP
F-9	Cummings PTD0200CM	Emergency generator	355 HP
F-13	Cummings 125ROZ271	Emergency generator	207 HP
F-14	Detroit 250R02D	Emergency generator	423 HP
F-5	Caterpillar D150-8[1]	Emergency generator	200 HP

Notes:

1. The F-5 emergency generator remains subject to the Industry Performance Standards for Emergency Engines and Turbines as contained in Department Regulation 310 CMR 7.26(40) through (42) and is not approved herein. The Facility remains responsible for maintaining compliance with all requirements of said regulations, including, but not limited to notification requirements contained therein.

2. The Facility is responsible for ensuring that the emissions from all engines are included for purposes of making compliance determinations with the Facility's emission limitations.

TABLE NO. 2A [1]
FACILITY – WIDE EMISSION LIMITATIONS [7]
FISCAL MONTH
ISP FREETOWN FINE CHEMICALS INC.

Building/ Area	VOC Tons Per Month			HOC Tons Per Month			VOC/HOC Tons Per Month			Inorganic Gases [2]	NO_X	CO	CO_2	SO_2	$PM/PM_{10}/PM_{2.5}$
	Vent	Fugitive	Total	Vent	Fugitive	Total	Vent	Fugitive	Total	Tons per Month (tpm)					
F-5 Production Facilities (Chemical Processing)	0.41	1.42	1.83	1.00	0.25	1.25	1.41	1.67	3.08	0.42	0.00	0.00	0	-	0.50 [6]
F-7/F-13 Wastewater Treatment Plant	0.21	0.00	0.21	0.08	0.00	0.08	0.30	0.00	0.30	0.00	0.00	0.00	0	-	0.00
Secondary [3]	0.00	0.08	0.08	0.00	0.09	0.09	0.00	0.18	0.18	0.00	0.00	0.00			0.00
Bulk Solvent storage tanks	0.02	0.30	0.32	0.02	0.08	0.10	0.03	0.38	0.42	0.00	0.00	0.00	0	-	0.00
SUBTOTAL	**0.64**	**1.80**	**2.44**	**1.10**	**0.42**	**1.52**	**1.74**	**2.23**	**3.98**	**0.42**	**0.00**	**0.00**	0	-	**0.50**
Emergency Generators	0.79	0.00	0.79	0.00	0.00	0.00	0.79	0.00	0.79	-	7.42	1.77	310	0.55	0.54
Boiler #1	0.32	0.00	0.32	0.00	0.00	0.00	0.32	0.00	0.32	-	0.52	0.86	1,318	0.77	0.11
Boiler #3	0.44	0.00	0.44	0.00	0.00	0.00	0.44	0.00	0.44	-	0.73	1.18	1,808	0.01	0.17
Hot Oil Heater	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.01	-	0.27	0.18	356	0.07	0.03
SUBTOTAL	**1.56**	**0.00**	**1.56**	**0.00**	**0.00**	**0.00**	**1.56**	**0.00**	**1.56**	**-**	**8.94**	**3.99**	**3,791**	**1.40**	**0.85**
TOTAL FACILITY WITHOUT F-1/F-4	***2.20***	***1.80***	***4.00***	***1.10***	***0.42***	***1.52***	***3.30***	***2.23***	***5.54***	***0.42***	***8.94***	***3.99***	***3,791***	***1.40***	***1.35***
Provision III.9 Allowances For small sources [4]	-	-	0.50	-	-	0.25	-	-	0.75	0.02	0.02	0.02	-	-	0.02
F-1/F-4 [5] Laboratories and Pilot Plant	-	-	0.82	-	-	-	-	-	0.82	0.08	0.05	0.08	-	-	0.08
EU #B-452 as per SE-12-010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02
TOTAL FACILITY	-	-	***5.32***	-	-	***2.00***	-	-	***7.11***	***0.52***	***9.01***	***4.09***	***3,791***	***1.40***	***1.47***

NOTES:

1. Table based on information derived from Table No. 2A in Approval No. 4P10034 and updated emission unit calculations.
2. Inorganic gases include NH_3, HCl, HBr, SO_2, and traces of SO_3
3. Secondary off-site emissions of VOC/HOC/HAPs included as constituents in the wastewater that is discharged to the Fall River POTW. These secondary emissions are shown in fugitive column for convenience.
4. As per Table No. 2A in Approval No. 4P10034, ISP may re-allocate the 0.75 tpm of total VOC/HOC shown for Special Condition III.9 sources by redistributing the amounts between VOC/HOC categories provided that the total of 0.75 remains unchanged and that the re-allocation be identified on this table and forwarded to the Department, prior to exceeding any of the original values.
5. As per Table No. 2A in Approval No. 4P10034, the proposed potential for F-1/F-4 is 0.82 tpm of VOC/HOC combined. The full 0.82 tons is shown here in the VOC column to represent the worst case with respect to a determination of Federal major source. Actual emissions will be tracked and reflected in the appropriate category (VOC or HOC).
6. 2.06 lb/hr maximum rate with zero percent opacity exclusive of uncombined water vapor.
7. HAP limitations are identified in Section I. “Emissions Limitations” of this Approval.

TABLE NO. 2B [1]
ISP FREETOWN FINE CHEMICALS INC. FACILITY – WIDE EMISSION LIMITATIONS [7]
CONSECUTIVE 12-MONTH PERIOD

Building/ Area	VOC Tons Per Year			HOC Tons Per Year			VOC/HOC Tons Per Year			Inorganic Gases [2]	NO_X	CO	CO_2	SO_2	$PM/PM_{10}/PM_{2.5}$
	Vent	Fugitive	Total	Vent	Fugitive	Total	Vent	Fugitive	Total	Tons per Year [8]					
F-5 Production Facilities (Chemical Processing)	2.46	8.50	10.96	6.01	1.50	7.51	8.47	10.00	18.47	2.50	0.00	0.00	0	-	3.01 [6]
F-7/F-13 Wastewater Treatment Plant	1.28	0.00	1.28	0.49	0.00	0.49	1.77	0.00	1.77	0.00	0.00	0.00	0	-	0.00
Secondary [3]	0.00	0.50	0.50	0.00	0.55	0.55	0.00	1.05	1.05	0.00	0.00	0.00			0.00
Bulk Solvent storage tanks	0.10	1.80	1.90	0.10	0.50	0.60	0.20	2.30	2.50	0.00	0.00	0.00	0	-	0.00
SUBTOTAL	**3.84**	**10.80**	**14.64**	**6.60**	**2.55**	**9.15**	**10.44**	**13.35**	**23.79**	**2.50**	**0.00**	**0.00**	0	-	**3.01**
Emergency Generators	0.79	0.00	0.79	0.00	0.00	0.00	0.79	0.00	0.79	-	7.42	1.77	310	0.55	0.54
Boiler #1	3.78	0.00	3.78	0.00	0.00	0.00	3.78	0.00	3.78	-	4.56	10.09	14,898	0.84	1.27
Boiler #3	5.19	0.00	5.19	0.00	0.00	0.00	5.19	0.00	5.19	-	6.27	13.84	20,433	0.10	1.75
Hot Oil Heater	0.14	0.00	0.14	0.00	0.00	0.00	0.14	0.00	0.14	-	3.15	2.16	4,186	0.79	0.38
SUBTOTAL	**9.91**	**0.00**	**9.91**	**0.00**	**0.00**	**0.00**	**9.91**	**0.00**	**9.91**	**-**	**21.40**	**27.87**	**39,827**	**2.28**	**3.93**
TOTAL FACILITY WITHOUT F-1/F-4	***13.75***	***10.80***	***24.55***	***6.60***	***2.55***	***9.15***	***20.35***	***13.35***	***33.70***	***2.50***	***21.40***	***27.87***	***39,827***	***2.28***	***6.94***
Provision III.9 Allowances For small sources [4]	-	-	3.00	-	-	0.75	-	-	3.75	0.10	0.10	0.10	-	-	0.10
F-1/F-4 [5] Laboratories and Pilot Plant	-	-	4.90	-	-	-	-	-	4.90	0.50	0.50	0.50	-	-	0.50
EU #B-452 as per SE-12-010	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.16
TOTAL FACILITY	***-***	***-***	***32.45***	***-***	***-***	***9.90***	***-***	***-***	***42.35***	***3.10***	***22.00***	***28.47***	***39,827***	***2.28***	***7.70***

NOTES:
1. Table based on information derived from Table No. 2B in Approval No. 4P10034 and updated emission unit calculations.
2. Inorganic gases include NH_3, HCl, HBr, SO_2, and traces of SO_3
3. Secondary off-site emissions of VOC/HOC/HAPs included as constituents in the wastewater that is discharged to the Fall River POTW. These secondary emissions are shown in fugitive column for convenience.
4. As per Table No. 2B in Approval No. 4P10034, ISP may re-allocate the 3.75 tpy of total VOC/HOC shown for provision III.9 sources by redistributing the amounts between VOC/HOC categories provided that the total of 3.75 remains unchanged and that the re-allocation be identified on this table and forwarded to the Department, prior to exceeding any of the original values.
5. As per Table No. 2B in Approval No. 4P10034, the proposed potential for F-1/F-4 is actually 4.90 tpy of VOC/HOC combined. The full 4.90 tons is shown here in the VOC column to represent the worst case with respect to a determination of Federal major source. Actual emissions will be tracked and reflected in the appropriate pollutant category (VOC or HOC).
6. 2.06 lb/hr maximum rate with zero percent opacity exclusive of uncombined water vapor.
7. HAP limitations are identified in Section I. “Emissions Limitations” of this Approval.
8. Tons per Year based on a consecutive 12-month period.

ATTACHMENT NO. 1

NO_X EMISSIONS PLAN

The NO_X limitation on potential to emit becomes effective on the date of this Conditional Approval.

1. ISP shall demonstrate compliance with the site-wide limitation of 22.0 tons/yr based on a consecutive 12-month period, by means of the following federally enforceable constraints:

   a. NO_X emissions from the devices identified below shall be limited, on a three-hour averaging basis, as listed below:

Boiler #1	Using Distillate	0.14 lbs NO_X/MMBtu
	Using Natural gas	0.035 lbs NO_X/MMBtu
Boiler #3	Using ULSD oil	0.15 lbs NO_X/MMBtu
	Using Natural gas	0.035 lbs NO_X/MMBtu
Emergency Engines Nos. 1 – 5	Using ULSD oil	14 grams/hp-hr
Emergency Engine No. 6	Using ULSD oil	0.2 grams/hp-hr
Hot Oil Heater	Using Distillate	0.12 lbs NO_X/MMBtu
	Using Natural gas	0.035 lbs NO_X/MMBtu

   b. Monthly fuel consumption records will be kept for all fuels used in all fossil fuel utilization equipment.

   c. Monthly NO_X emissions for the boilers and the hot oil heater will be calculated by multiplying the NO_X emission factor from (a) above by the consumption of fuel for the month times a higher heating value of 150,000 BTU/gal for Distillate, 140,000 BTU/gal for ULSD oil, and by 1020 BTU/standard cubic foot (scf) for natural gas.

   d. For emergency engines, ISP has installed hour use meters on each engine and calculates monthly NO_X emissions by multiplying the total hours of operation of each engine times the horsepower rating of the engine times the factor in (a) above, and then summing for all engines.

   e. Consecutive 12-month period totals will be calculated by adding the monthly totals of (c) plus (d) above and will include the potential of 0.05 tons/month of process NO_X emissions from F-1/F-4.

ATTACHMENT NO. 2

ACTIVE OR PLANNED BATCH PROCESSES TO BE PRODUCED AT THE FACILITY

Process	*Emissions Control Required*		*No Control Req.*
	VOC/HOC	*Acid Gases*	*VOC/HOC (1)*
	F5 VRUs	*Fume Scrubber*	*(process emissions)*
Diaion HP2MG			✓
Trimedlure A			✓
Trimedlure B	✓		
Trimedlure C			✓
IPBC	✓		
BuMgCl	✓		
Gossyplure Crude	✓		
TEQ Drying			✓
CERAPHYL 41			✓
CERAPHYL 424			✓
CERAPHYL 60	✓		
CERAPHYL 847			✓
CERAPHYL 791			✓
CERAPHYL 28			✓
CERAPHYL 494			✓
DODECYL TOSYLATE	✓		
CERAPHYL RMT			✓
ESCALOL HP-610	✓		
CERAPHYL 50			✓
CERAPHYL 31			✓
CERAPHYL NGA			✓
CERAPHYL 70 MCA			✓
CERAPHYL 70			✓
CERAPHYL 65			✓
PROLIPID 141			✓
CYCLICS PBT	✓		
VIVIPRINT 540			✓
AQUAFLEX FX-64	✓		
GANEX V-220 Flaking			✓
ESCALOL 577 Drying	✓		
GANEX WP-660 Flaking			✓
GANEX WP-660	✓		
AGRIMAX 3	✓		
STYLEZE CC-10			✓
PVP/VA	✓		
CERAPHYL 375			✓
MICROFLEX			✓
STYLEZE W-20			✓
STABILEZE 06			✓
PVP/VA-I735	✓		
PROLIPID 151			✓
CERAPHYL 230	✓		
CERASYNT SD			✓
VIVIPRINT 300			✓
CERASYNT Q			✓
DHDMP Step 1	✓		
VIVIPRINT 200	✓		

ATTACHMENT NO. 2

ACTIVE OR PLANNED BATCH PROCESSES TO BE PRODUCED AT THE FACILITY

Process	*Emissions Control Required*		*No Control Req.*
	VOC/HOC	*Acid Gases*	*VOC/HOC (1)*
	F5 VRUs	*Fume Scrubber*	*(process emissions)*
CERAPHYL 368			✓
CERASYNT MAM			✓
CERASYNT IP			✓
AQUAFLEX XL-30	✓		
PEROXYDONE K30/XL-10			✓
MAPLDMAC			✓
PROLIPID 161			✓
EASY-SPERSE	✓		
ESCALOL HP	✓		
CERASYNT PA			✓
EMULSYNT GDL			✓
EMULSYNT 900			✓
POLYGLYCEROL			✓
EMULSYNT 1055			✓
GANTREZ S97BF			✓
COPOLYMER 845			✓
AQUASTYLE 100	✓		
X-TEND 226			✓
AQUASTYLE 300	✓		
GANEX V-516	✓		
CERASYNT WM			✓
GANEX V-220	✓		
CERAPHYL ODS			✓
CERASYNT 840			✓
ULTRATHIX			✓
GANEX V-216	✓		
PVP K-30			✓
PVP K-15			✓
PVP K-60			✓
PVP K-90			✓
CERASYNT LP			✓
JAYPOL S44		✓	
JAYPOL HN70			✓
JAYPOL HS61			✓
STYLEZE XT3			✓
JAYPOL HS77, S77			✓
JAYPOL HS62			✓
XxtraDura FLA 3766			✓
Inhibex 501			✓
Conditioneze 22			✓
Conditioneze 37 E/M			✓
Aroset 6211S	✓		

NOTES for Attachment No. 2:

1. Controls are not required for Low VOC/HOC products, i.e. processes that produce less than 85 lbs total VOC/HOC per batch).

ATTACHMENT NO. 3

CURRENT BATCH CHEMICALS PER BATCH FUGITIVE VOC/HOC AND ACID GAS EMISSIONS[4]

Batch Designation	*Fugitive Emissions (lbs/batch)*		*Acid gas emission[5] lb/batch*	*Batch size for estimate (lbs)*	*Date of Notification*
	VOC	*HOC*			
DRUM STORAGE & HANDLING[3]	526.7	0.0	0.0	N/A	
Diaion HP2MG	0.0	0.0	0.0	76.2	5/28/98
Trimedlure A	17.2	0.0	0.0	4400	11/9/98
Trimedlure B	9.6	0.0	0.139	4400	11/20/98
Trimedlure C	17.0	0.0	0.0	4730	11/25/98
IPBC	66.6	0.0	0.0	5790	12/4/98
BuMgCl	7.0	0.0	0.0	4796	1/18/99
Gossyplure Crude	14.7	0.0	0.002	1600	1/29/99
TEQ Drying	0.0	0.0	0.0	3300	2/22/99
CERAPHYL 41	0.0	0.0	0.0	5500	11/14/00
CERAPHYL 424	0.0	0.0	0.0	5450	12/21/00
CERAPHYL 60	6.6	0.0	0.0	7650	1/12/01
CERAPHYL 847	0.0	0.0	0.0	4570	1/12/01
CERAPHYL 791	0.0	0.0	0.0	5055	1/12/01
CERAPHYL 28	0.0	0.0	0.0	4875	1/12/01
CERAPHYL 494	0.0	0.0	0.0	5300	2/12/01
DODECYL TOSYLATE	23.3	0.0	0.0	8670	2/12/01
CERAPHYL RMT	0.0	0.0	0.0	7920	3/2/01
ESCALOL HP-610	4.8	0.0	0.0	9140	3/2/01
CERAPHYL 50	0.0	0.0	0.0	5925	3/2/01
CERAPHYL 31	0.0	0.0	0.0	6075	3/2/01
CERAPHYL NGA	0.0	0.0	0.0	7380	3/28/01
CERAPHYL 70 MCA	0.0	0.0	0.0	6930	3/28/01
CERAPHYL 70	1.1	0.0	0.0	6120	3/28/01
CERAPHYL 65	0.7	0.0	0.0	11,165	3/28/01
PROLIPID 141	0.0	0.0	0.0	4830	3/28/01
CYCLICS PBT	638	0.0	0.0	9000	9/14/01
VIVIPRINT 540	1.1	0.0	0.0	18,550	10/25/01
AQUAFLEX FX-64	7.6	0.0	0.0	60,000	11/15/01
GANEX V-220 Flaking	0.0	0.0	0.0	20,000	12/19/01
ESCALOL 577 Drying	0.0	0.0	0.0	1,210	12/19/01
GANEX WP-660 Flaking	0.0	0.0	0.0	7,000	1/11/2002
GANEX WP-660	7.3	0.0	0.0	7,000	1/16/2002
AGRIMAX 3	4.0	0.0	0.0	10,250	2/07/2002
STYLEZE CC-10	0.3	0.0	0.0	1950	4/19/2002
PVP/VA	4.1	0.0	0.0	31,100	5/7/2002
CERAPHYL 375	11.0	0.0	0.0	7,100	6/12/2002
MICROFLEX	6.8	0.0	0.0	10,000	6/24/2002
STYLEZE W-20	1.4	0.0	0.0	21,600	7/3/2002
STABILEZE 06	0.0	0.0	0.0	2,000	8/14/2002
PVP/VA-I735	5.9	0.0	0.0	4,680	9/17/2002
PROLIPID 151	0.0	0.0	0.0	4,600	2/05/03
CERAPHYL 230	9.5	0.0	0.0	4,650	3/12/03
CERASYNT SD	2.2	0.0	0.0	17,450	3/26/03
VIVIPRINT 300	5.8	0.0	0.0	7,600	3/26/03
CERASYNT Q	2.2	0.0	0.0	18,800	3/26/03
DHDMP Step 1	64.1	0.0	0.0	2,770	4/11/03
VIVIPRINT 200	3.0	0.0	0.0	19,100	4/25/03
CERAPHYL 368	1.9	0.0	0.0	8,280	6/3/03

ATTACHMENT NO. 3

CURRENT BATCH CHEMICALS PER BATCH FUGITIVE VOC/HOC AND ACID GAS EMISSIONS[4]

Batch Designation	*Fugitive Emissions (lbs/batch)*		*Acid gas emission[5] lb/batch*	*Batch size for estimate (lbs)*	*Date of Notification*
	VOC	*HOC*			
CERASYNT MAM	2.5	0.0	0.0	8,175	7/14/03
CERASYNT IP	1.9	0.0	0.0	18,100	7/14/03
AQUAFLEX XL-30	3.8	0.0	0.0	38,700	8/15/03
PEROXYDONE K30/XL-10	0.0	0.0	0.0	400	10/9/03
MAPLDMAC	8.1	0.0	0.0	4,400	1/30/04
PROLIPID 161	0.6	0.0	0.0	9,600	6/23/04
EASY-SPERSE	11.6	0.0	0.0	21,100	7/20/04
ESCALOL HP	27.8	0.0	0.0	2,000	10/12/04
CERASYNT PA	2.0	0.0	0.0	16,400	12/10/04
EMULSYNT GDL	0.8	0.0	0.0	16,650	3/3/05
EMULSYNT 900	0.8	0.0	0.0	6,500	3/3/05
POLYGLYCEROL	0.7	0.0	0.0	11,450	3/3/05
EMULSYNT 1055	0.7	0.0	0.0	18,800	3/3/05
GANTREZ S97BF	<0.01	0.0	0.0	69,300	4/18/05
COPOLYMER 845	0.1	0.0	0.0	22,100	5/20/05
AQUASTYLE 100	3.2	0.0	0.0	21,100	6/20/05
X-TEND 226	2.9	0.0	0.0	20,600	8/11/05
AQUASTYLE 300	2.8	0.0	0.0	20,850	1/20/06
GANEX V-516	9.3	0.0	0.0	32,600	1/20/06
CERASYNT WM	1.6	0.0	0.0	19,450	1/20/06
GANEX V-220	20	0.0	0.0	19,550	2/17/06
CERAPHYL ODS	1.8	0.0	0.0	17,150	5/9/06
CERASYNT 840	2.0	0.0	0.0	20,200	5/9/06
ULTRATHIX	0.0	0.0	0.0	1,000	7/10/06
GANEX V-216	5.8	0.0	0.0	20,750	11/30/06
PVP K-30	0.9	0.0	0.0	21,500	12/14/06
PVP K-15	0.8	0.0	0.0	22,650	12/14/06
PVP K-60	1.0	0.0	0.0	22,800	12/14/06
PVP K-90	1.2	0.0	0.0	23,830	2/8/07
CERASYNT LP	1.5	0.0	0.0	11,250	10/5/07
JAYPOL S44	3.7	0.0	2.6	20,425	10/13/2010
JAYPOL HN70	7.8	0.0	0.0	16,600	6/30/2011
JAYPOL HS61	2.9	0.0	0.0	18,450	11/1/2011
STYLEZE XT3	0.0	0.0	0.0	11,325	1/19/2012
JAYPOL HS77, S77	0.0	0.0	0.0	25,650	2/29/12
JAYPOL HS62	2.6	0.0	0.0	18,600	3/7/12
XxtraDura FLA 3766	1.3	0.0	0.0	28,300	9/05/12
Inhibex 501	4.2	0.0	0.0	33,500	12/18/12
Conditioneze 22	1.1	0.0	0.0	34,000	4/26/13
Conditioneze 37 E/M	0.9	0.0	0.0	22,400	5/30/13
Aroset 6211S	4.8	0.0	0.0	33,500	6/21/13

Notes for Attachment No. 3:

1. Batch size for the alcohol recovery system is based on 100,000 gallons of waste fed at 18% v/v isopropanol.
2. Monthly tank farm emissions are based on 1/12 of the established potential to emit.
3. This figure (526.7 lbs/yr) is based on 10,000 drums per year handled at ISP. The actual number (worst case) of drums historically shipped/ received is 4,100 drums (that would be handled at least twice). This number is based on a memo "Drum Handling Summary," dated 6/30/92 from Polaroid.
4. The emission quantities in this table are the quantities calculated in the Batch Emission Calculation Reports multiplied by a 15% safety factor.
5. Acid gas emissions quantities are before control, if required.

ATTACHMENT NO. 4

LIST OF HAPS EMITTED FROM F-1/F-4	
Acetamide	60-35-5
Acetaldehyde	75-07-0
Acetonitrile	75-08-8
Acrolein	107-02-8
Acrylamide	79-06-1
Acrylic Acid	79-10-7
Acrylonitrile	107-13-1
Benzene	71-43-2
Bromoform	75-25-2
Chlorobenzene	108-90-7
Chloroform	67-66-3
1,4-dichlorobenzene	106-46-7
Diethanolamine	111-42-2
Dimethyl formamide	68-12-2
Dimethyl sulfate	77-78-1
1,4 dioxane	123-91-1
Epichlorohydrin	106-89-8
Ethyl benzene	100-41-4
Ethyl Acrylate	140-88-5
Ethylene glycol	107-21-1
Formaldehyde	50-00-0
Hexane	110-54-3
Hydrochloric acid	7647-01-0
Hydroquinone	123-31-9
Maleic anhydride	108-31-6
Methanol	67-56-1
Methyl bromide	74-83-9
Methyl chloride	74-87-3
Methyl ethyl ketone	78-93-3
Methyl isobutyl ketone	108-10-1
Methyl methacrylate	80-62-6
Methylene chloride	75-09-2
Toluene	108-88-3
Triethylamine	121-44-8
Vinyl Acetate	108-05-4
Mineral fibers	

ATTACHMENT NO. 5

EMISSIONS SUMMARY

Facility Area	Total VOC (lbs/mon)	Total HOC (lbs/mon)	Total Inorganic gas (lbs/mon)	$PM/PM_{2.5}/PM_{10}$ (lbs/mon)	Boiler SO_2 (lbs/mon)	NO_X (lbs/mon)	CO (lbs/mon)	CO_2 (tons/mon)
Building F-5 (Chemical Production)								
Building F-1/F-4 (Lab & Pilot Plant)*								
Ancillary Operations								
Fuel Utilization Equipment								
FACILITY TOTAL								
FACILITY TOTAL HAPs		lbs/month						

EMISSIONS SUMMARY

Facility Area	VOC Emission (lbs/mon)	HOC Emission (lbs/mon)	HAP Emission (lbs/mon)	Acid Gas (lbs/mon)
1. Building F-5 (Chemical Production) PROCESSES THAT DO NOT VENT TO THE VRU				
A. Process/Product Name				
Batches/month:				
VOCs lbs/batch:				
HOCs lbs/batch:				
HAPs lbs/batch:				
Acid Gas lbs/batch:				
B. Process/Product Name				
Batches/month:				
VOCs lbs/batch:				
HOCs lbs/batch:				
HAPs lbs/batch:				
Acid Gas lbs/batch:				
C. Process/Product Name				
Batches/month:				
VOCs lbs/batch:				
HOCs lbs/batch:				
HAPs lbs/batch:				
Acid Gas lbs/batch:				
PROCESSES THAT VENT TO THE VRU				
D. Process/Product Name				
Batches/month:				
Acid Gas lbs/batch:				
E. Process/Product Name				
Batches/month:				
Acid Gas lbs/batch:				
F. Process/Product Name				
Batches/month:				
Acid Gas lbs/batch:				

EMISSIONS SUMMARY

Facility Area	VOC Emission (lbs/mon)	HOC Emission (lbs/mon)	HAP Emission (lbs/mon)	Acid Gas (lbs/mon)
1. Building F-5 (Chemical Production) PROCESSES THAT VENT TO THE VRU (con't)				
G. Process/Product Name				
Batches/month:				
Acid Gas lbs/batch:				
H. Process/Product Name				
Batches/month:				
Acid Gas lbs/batch:				
I. Process/Product Name				
Batches/month:				
Acid Gas lbs/batch:				
J. Process/Product Name				
Batches/month:				
Acid Gas lbs/batch:				
K. Process/Product Name				
Batches/month:				
Acid Gas lbs/batch:				
L. Process/Product Name				
Batches/month:				
Acid Gas lbs/batch:				
VRU DATA Total gas flow (scf/fill period)				
Time weighted avg. Temp (°C)				
VOC/HOC fugitives from all F-5 processes.				
BUILDING F-5 MONTHLY TOTAL EMISSIONS				

EMISSIONS SUMMARY

Facility Area	VOC/HOC EMISSION (lbs/month)		
2. Building F-1/F-4 (Pilot Production)			
	HAP Emissions		

Facility Area	VOC Emission (lbs/month)	HOC Emission (lbs/month)	HAP Emission (lbs/month)	Acid Gas (lbs/month)
3. Ancillary Operations				
A. Building F-7/F-13 (Wastewater Treatment Plant)				
B. Alcohol Recovery				
C. Bulk Storage Tanks				
ANCILLARY OPERATIONS MONTHLY TOTAL EMISSIONS				

EMISSIONS SUMMARY

Facility Area	VOC (lbs/month)	PM/PM $_{2.5}$ /PM_{10} (lbs/month)	SO_2 (lbs/month)	NOx (lbs/month)	CO (lbs/month)	CO_2 (tons/month)
4. Fuel Utilization Equipment						
A. *Boiler #1*						
SCF Natural Gas						
Gallons #2 Oil						
B. *Boiler #3*						
SCF Natural Gas						
Gallons ULSD Oil						
C. *Emergency Generators/ compressors/ pumps*						
D. *Hot Oil Heater*						
Gallons #2 Oil						
TOTAL MONTHLY EMISSIONS:						

ATTACHMENT NO. 6

APPEAL OF APPROVAL

This Approval is an action of the Department. If you are aggrieved by this action, you may request an adjudicatory hearing. A request for a hearing must be made in writing and postmarked within twenty-one (21) days of the date of issuance of this Approval.

Under 310 CMR 1.01(6)(b), the request must state clearly and concisely the facts that are the grounds for the request, and the relief sought. Additionally, the request must state why the Approval is not consistent with applicable laws and regulations.

The hearing request along with a valid check payable to Commonwealth of Massachusetts in the amount of one hundred dollars ($100.00) must be mailed to:

Commonwealth of Massachusetts
Department of Environmental Protection
P.O. Box 4062
Boston, MA 02211

The request will be dismissed if the filing fee is not paid, unless the appellant is exempt or granted a waiver as described below.

The filing fee is not required if the appellant is a city or town (or municipal agency), county, or district of the Commonwealth of Massachusetts, or a municipal housing authority.

The Department may waive the adjudicatory hearing filing fee for a person who shows that paying the fee will create an undue financial hardship. A person seeking a waiver must file, together with the hearing request as provided above, an affidavit setting forth the facts believed to support the claim of undue financial hardship.